

What is claimed:

1. An isolated nucleic acid molecule selected from the group consisting of:

- 5           a) a nucleic acid molecule comprising a nucleotide sequence which is at least 75% homologous to a nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, or a complement thereof;
- 10           b) a nucleic acid molecule comprising a fragment of at least 30 nucleotides of a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, or a complement thereof;
- 15           c) a nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least about 60% homologous to the amino acid sequence of SEQ ID NO:2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_;
- 20           d) a nucleic acid molecule which encodes a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or the polypeptide encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, wherein the fragment comprises at least 10 contiguous amino acid residues of the amino acid sequence of SEQ ID NO:2, or the polypeptide encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_; and
- 25           e) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, wherein the nucleic acid molecule hybridizes to a complement of a nucleic acid molecule comprising SEQ ID NO:1 or SEQ ID NO:3 under stringent conditions.

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2. The isolated nucleic acid molecule of claim 1 which is selected from the group consisting of:

- 35           a) a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, or the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, or a complement thereof; and
- b) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an amino acid sequence encoded

by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_.

3. The nucleic acid molecule of claim 1 further comprising vector nucleic acid sequences.

4. The nucleic acid molecule of claim 1 further comprising nucleic acid sequences encoding a heterologous polypeptide.

5. A host cell which contains the nucleic acid molecule of claim 1.

6. The host cell of claim 5 which is a mammalian host cell.

7. A non-human mammalian host cell containing the nucleic acid molecule of claim 1.

8. An isolated polypeptide selected from the group consisting of:

a) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or the polypeptide encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, wherein the fragment comprises at least 10 contiguous amino acids of SEQ ID NO:2, or the amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_;

b) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes to a complement of a nucleic acid molecule comprising SEQ ID NO:1 or SEQ ID NO:3, under stringent conditions; and

c) a polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 75% homologous to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:3, or the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_.

d) a polypeptide comprising an amino acid sequence which is at least 60% homologous to the amino acid sequence of SEQ ID NO:2, or the

polypeptide encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_.

9. The isolated polypeptide of claim 8 comprising the amino acid sequence  
5 of SEQ ID NO:2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_.

10. The polypeptide of claim 8 further comprising heterologous amino acid sequences.

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11. An antibody which selectively binds to a polypeptide of claim 8.

12. A method for producing a polypeptide selected from the group consisting of:

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a) a polypeptide comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_;

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b) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_ wherein the fragment comprises at least 10 contiguous amino acids of SEQ ID NO:2, or the amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_; and

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c) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an amino acid sequence encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number \_\_\_\_\_, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes to a complement of a nucleic acid molecule comprising SEQ ID NO:1 or SEQ ID NO:3, under stringent conditions;

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13. A method for detecting the presence of a polypeptide of claim 8 in a sample comprising:

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a) contacting the sample with a compound which selectively binds to the polypeptide; and

b) determining whether the compound binds to the polypeptide in the sample to thereby detect the presence of a polypeptide of claim 8 in the sample.

14. The method of claim 13, wherein the compound which binds to the polypeptide is an antibody.

5 15. A kit comprising a compound which selectively binds to a polypeptide of claim 8 and instructions for use.

16. A method for detecting the presence of a nucleic acid molecule in claim 1 in a sample comprising:

- 10 a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule; and  
b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample to thereby detect the presence of a nucleic acid molecule of claim 1 in the sample.

15 17. The method of claim 16, wherein the sample comprises mRNA molecules and is contacted with a nucleic acid probe.

18. A kit comprising a compound which selectively hybridizes to a nucleic acid molecule of claim 1 and instructions for use.

19. A method for identifying a compound which binds to a polypeptide of claim 8 comprising:

- 25 a) contacting the polypeptide, or a cell expressing the polypeptide with a test compound; and  
b) determining whether the polypeptide binds to the test compound.

20. The method of claim 19, wherein the binding of the test compound to the polypeptide is detected by a method selected from the group consisting of:

- 30 a) detection of binding by direct detection of test compound/polypeptide binding;  
b) detection of binding using a competition binding assay; and  
c) detection of binding using an assay for EBI-3-alt activity.

35 21. A method of modulating the activity of a polypeptide of claim 8 comprising contacting the polypeptide or a cell expressing the polypeptide with a compound which binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.

22. A method for identifying a compound which modulates the activity of a polypeptide of claim 8 comprising:

- 5 a) contacting a polypeptide of claim 8 with a test compound; and
- b) determining the effect of the test compound on the activity of the polypeptide to thereby identify a compound which modulates the activity of the polypeptide.

10 23. A method of for identifying a compound which modulates a EBI-3-alt associated disorder comprising:

- a) contacting a cell which expresses an EBI-3-alt receptor with a compound to form an assay mixture:
- 15 b) contacting the assay mixture with EBI-3-alt;
- c) determining whether the compound modulates EBI-3-alt activity, such that a modulatory compound is identified.